DTC	B1214	DOOR SYSTEM COMMUNICATION BUS MALFUNCTION (+B SHORT)

DTC	B1215	DOOR SYSTEM COMMUNICATION BUS MALFUNCTION (GND SHORT)

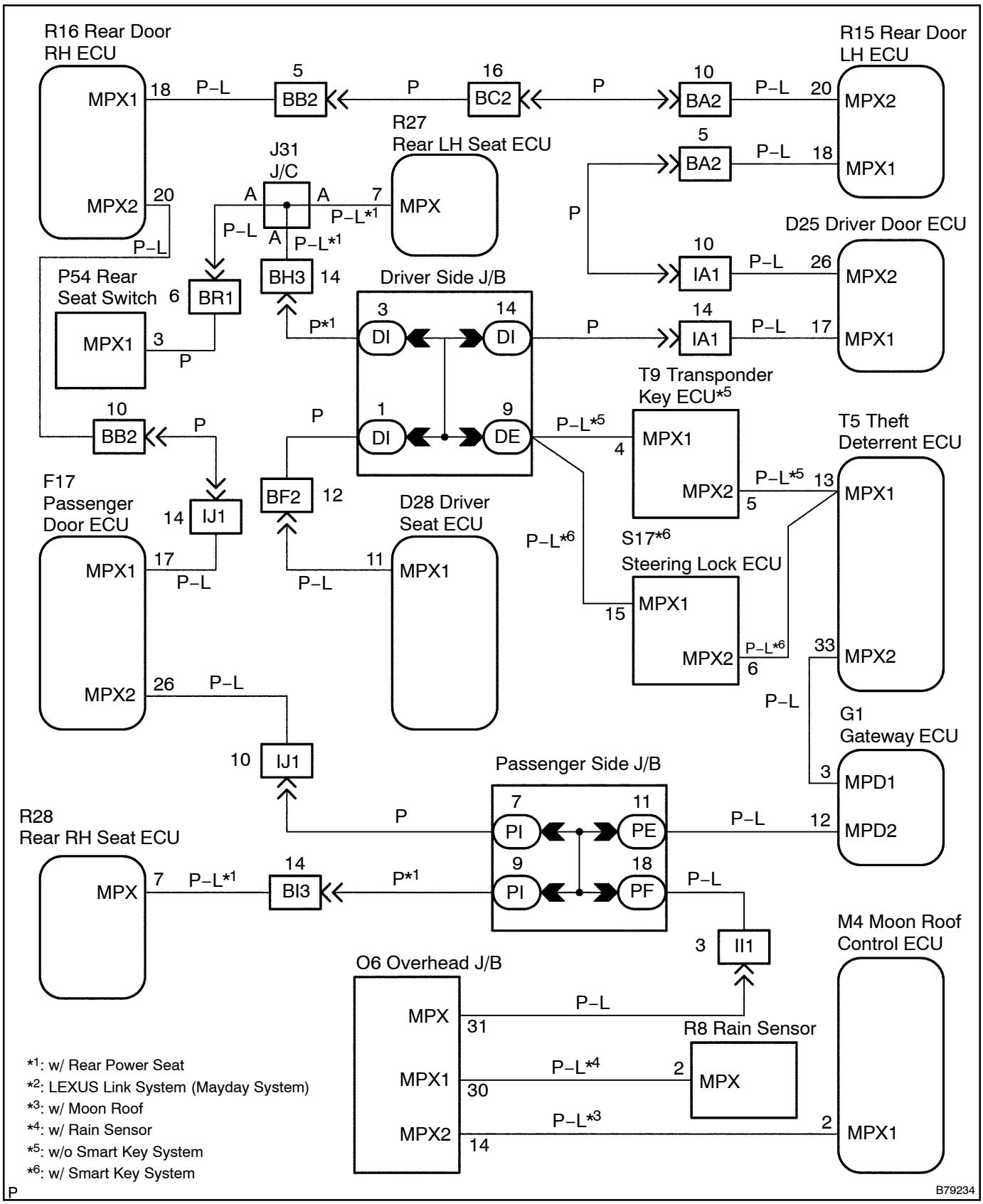
CIRCUIT DESCRIPTION

DTCs B1214 and B1215 are detected when +B and body ground is short–circuited on the door system communication bus. Detecting this condition will disable the door system communication bus (BEAN) and output some diagnosis codes.

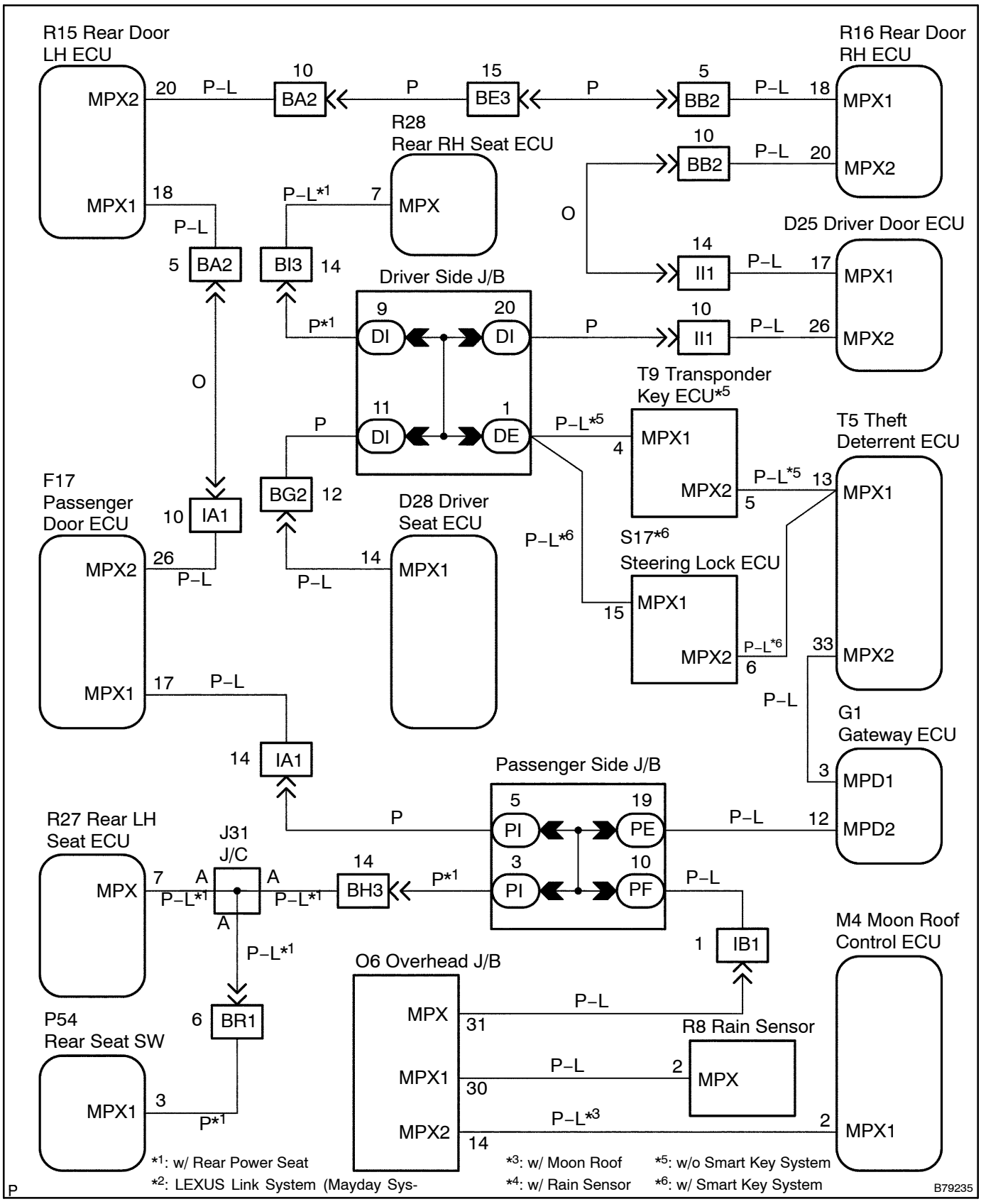
DTC NO.	DTC detection condition	Trouble area
B1214	Door system communication circuit and +B battery system short	• Theft warning ECU • Transponder key ECU*1 (Immobilizer ECU) • Steering lock ECU*2 • Driver door ECU • Driver seat ECU • Rear seat switch*3 • Rear LH seat ECU • Rear RH seat ECU • Rear door LH ECU • Rear door RH ECU • Overhead J/B • Rain sensor • Moon roof control ECU • Wire harness
B1215	Door system communication circuit and body ground short	• Theft warning ECU • Transponder key ECU*1 (Immobilizer ECU) • Steering lock ECU*2 • Driver door ECU • Driver seat ECU • Rear seat switch*3 • Rear LH seat ECU • Rear RH seat ECU • Rear door LH ECU • Rear door RH ECU • Overhead J/B • Rain sensor • Moon roof control ECU • Wire harness

*1: w/o Smart key system
*2: w/ Smart key system
*3: w/ Rear power seat

WIRING DIAGRAM (LHD)



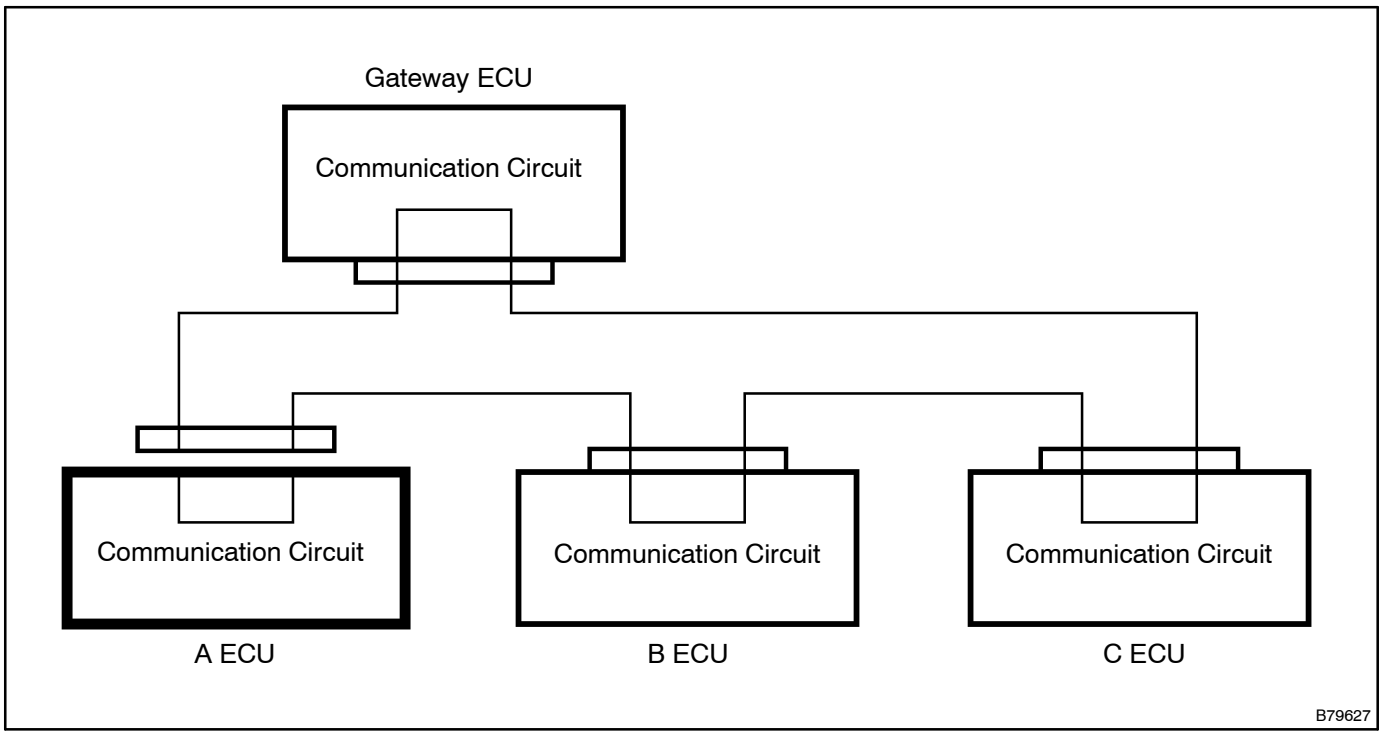
WIRING DIAGRAM (RHD)



INSPECTION PROCEDURE

1	CHECK DIAGNOSTIC TROUBLE CODE (A ECU)

(a) Disconnect the A ECU connector and check for DTCs B1214 and B1215.



OK: DTCs B1214 and B1215 are not output.

NOTICE:

Disconnect the connectors one by one. Reconnect the connector before starting the next check.

HINT:

- The A ECU in the door system bus represents the passenger door ECU.
- If the result is as specified, the disconnected A ECU (passenger door ECU) is malfunctioning.

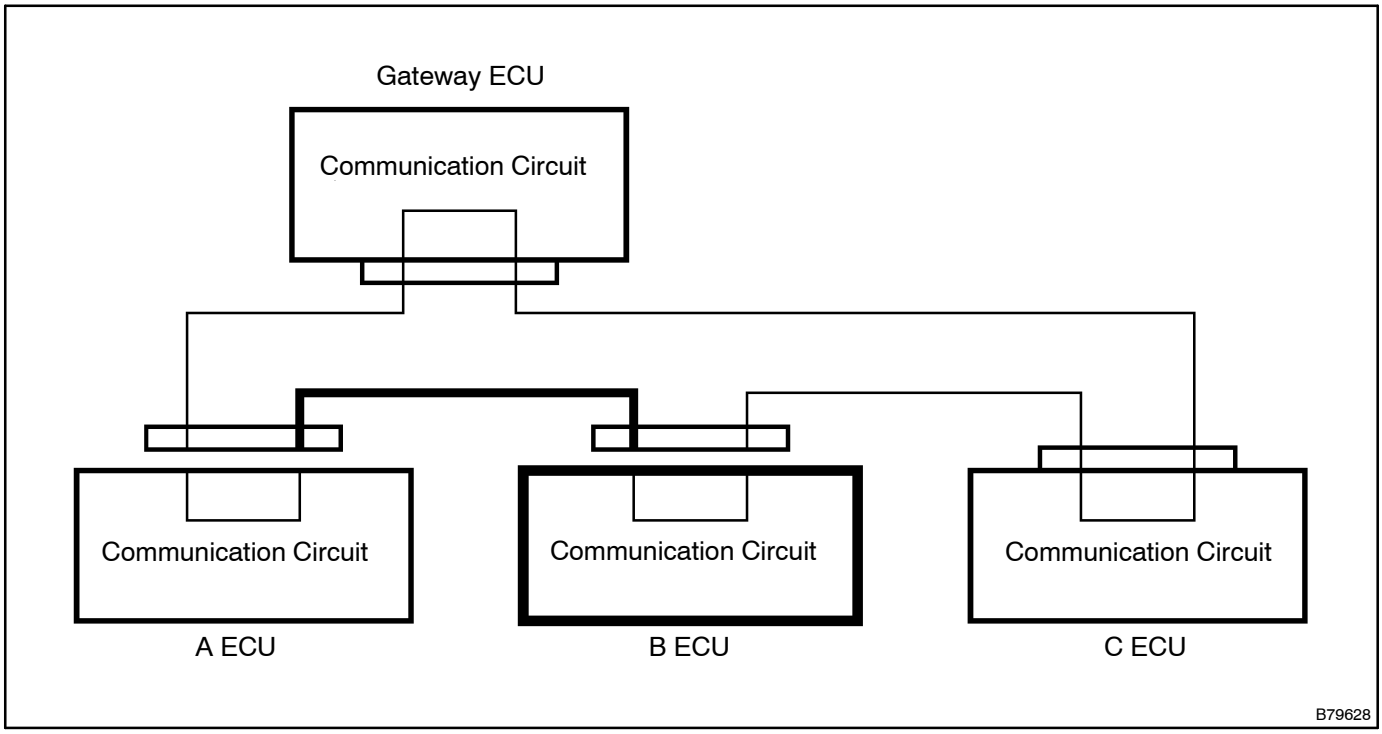
NG → **Go to step 2**

OK

REPLACE A ECU

2	CHECK DIAGNOSTIC TROUBLE CODE (B ECU)

(a) Disconnect the A ECU and B ECU connectors and check for DTCs B1214 and B1215.



OK: DTCs B1214 and B1215 are not output.

NOTICE:

Disconnect the connectors one by one. Reconnect the connector before starting the next check.

HINT:

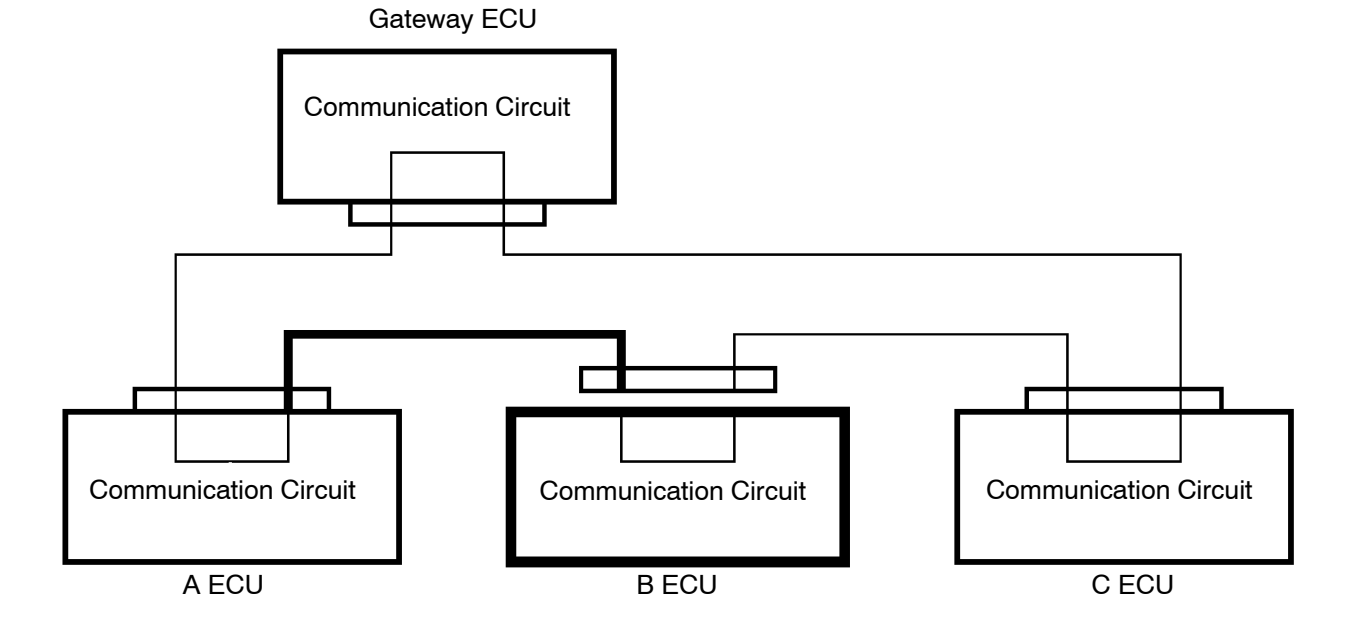
- The B ECU in the door system bus represents one of the following: transponder key ECU (immobilizer ECU), steering lock ECU, driver door ECU, driver seat ECU, rear seat switch, rear LH seat ECU, rear RH seat ECU, rear door LH ECU, rear door RH ECU, overhead J/B, rain sensor or moon roof control ECU
- If the result is as specified, the disconnected B ECU (one of the ECUs from the above list) or the wire harness between the A ECU and B ECU is malfunctioning.

NG	**Go to step 4**

OK

3	CHECK WIRE HARNESS BETWEEN A ECU AND B ECU

(a) Disconnect the B ECU connectors and check for DTCs B1214 and B1215.



OK: DTCs B1214 and B1215 are not output.

NOTICE:

Disconnect the connectors one by one. Reconnect the connector before starting the next check.

HINT:

If the result is as specified, the wire harness between the A ECU and B ECU is functioning normally but the disconnected B ECU is malfunctioning.

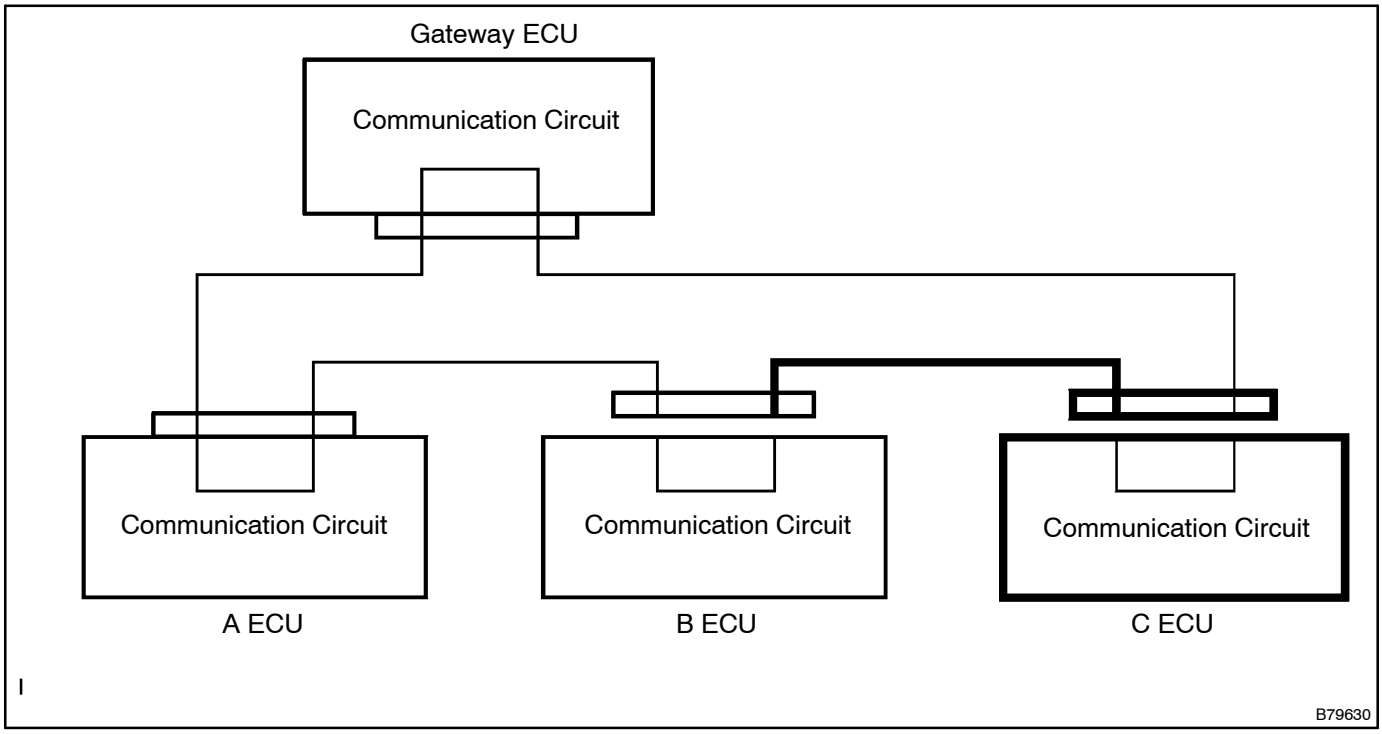
NG → **REPAIR OR REPLACE BETWEEN WIRE HARNESS OF A ECU AND B ECU**

OK

REPLACE B ECU

4	CHECK DIAGNOSTIC TROUBLE CODE (C ECU)

(a) Disconnect the B ECU and C ECU connectors and check for DTCs B1214 and B1215.



OK: DTCs B1214 and B1215 are not output.

NOTICE:

Disconnect the connectors one by one. Reconnect the connector before starting the next check.

HINT:

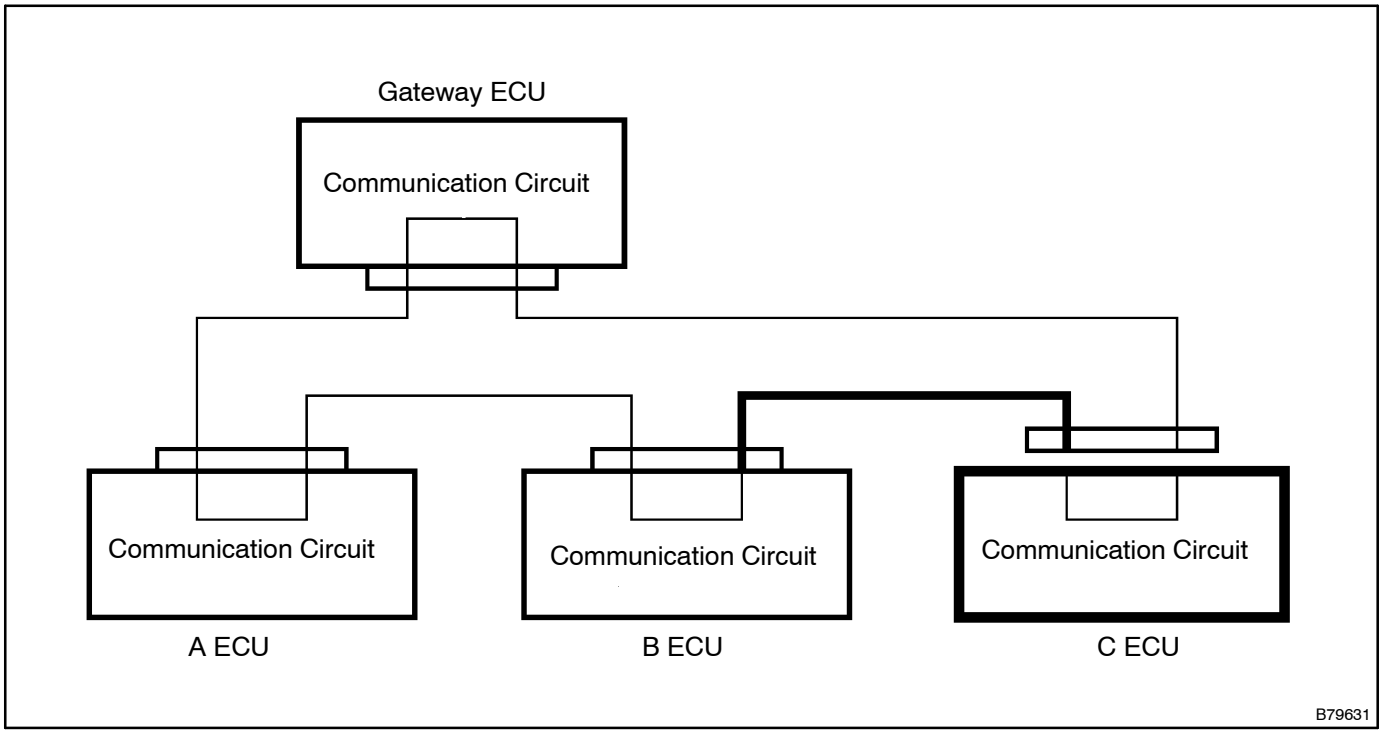
- The C ECU in the door system bus represents the theft warning ECU.
- If the result is as specified, the disconnected C ECU (theft warning ECU) or the wire harness between the B ECU and C ECU is malfunctioning.

NG	Go to step 6

OK

5	CHECK WIRE HARNESS BETWEEN B ECU AND C ECU

(a) Disconnect the C ECU connector and check for DTCs B1214 and B1215.



OK: DTCs B1214 and B1215 are not output.

NOTICE:

Disconnect the connectors one by one. Reconnect the connector before starting the next check.

HINT:

If the result is as specified, the wire harness between the B ECU and C ECU is functioning normally but the disconnected C ECU is malfunctioning.

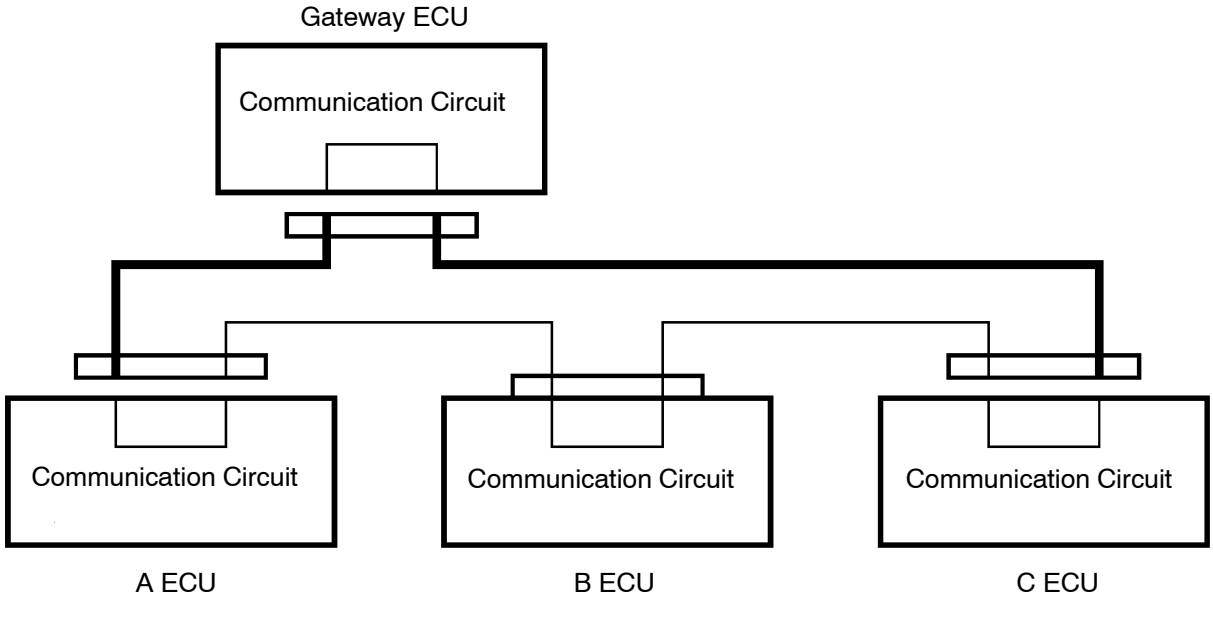
NG → **REPAIR OR REPLACE BETWEEN WIRE HARNESS OF B ECU AND C ECU**

OK

REPLACE C ECU

6	CHECK WIRE HARNESS BETWEEN GATEWAY ECU AND A ECU OR C ECU

(a) Check for a short–circuit in +B or body ground.



(1) Disconnect the A ECU, C ECU and gateway ECU connectors.
(2) Measure the voltage and resistance of the wire harness side connectors.

Standard:

Tester Connection	Specified Condition
A ECU connector / gateway ECU connector – body ground	0 V
C ECU connector / gateway ECU connector – body ground	0 V
A ECU connector / gateway ECU connector – body ground	10 kΩ or higher
C ECU connector / gateway ECU connector – body ground	10 kΩ or higher

HINT:

- The A ECU in the door system bus represents the passenger door ECU.
- The C ECU in the door system bus represents the theft warning ECU.

NG → **REPAIR OR REPLACE BETWEEN WIRE HARNESS OF GATEWAY ECU AND A ECU OR C ECU**

OK

REPLACE NETWORK GATEWAY ECU